

REMARKS

INTRODUCTORY COMMENTS:

In the Advisory Action dated July 23, 2002, the Examiner indicated that the submission under 37 C.F.R. § 1.116 had been entered and the amendments in the claims considered. The rejections under 35 U.S.C. §§ 102 and 112 were withdrawn. However, the Examiner maintained the rejections under 35 U.S.C. § 103, reiterating the rejection of the claims as obvious over Bernard in view of Chick, Lee and Dykens.

The aforementioned grounds of rejection are addressed by the above amendments. With this amendment, Applicants have canceled claim 29, amended claims 26-28, and added new claims 45-47. Therefore, claims 26-28, 30-32, 34-37 and 45-47 are now pending and under examination.

THE ABOVE AMENDMENTS:

Independent claim 26 has been amended to recite that the indirect attachment is effected through a linking moiety selected from the group consisting of an antibody, antibody fragment, biotin and streptavidin. Claim 26 has also been amended to recite that at least one member of the binding pair must be indirectly attached to fluorescein or cyanine 5. In addition, the lists of specific binding pair members has been deleted.

Support for this amendment is found in the claim as originally filed, and on pages 6, 11 and 25. In particular, the use of a binding pair having indirect attachment of fluorescein or cyanine 5 is found, for example, on page 6, lines 15-20 and page 11, lines 1-9. Further support can be found on page 25, which both describes and depicts schematically, the use of a linking moiety to attach fluorescein and cyanine 5.

Claims 27 and 28 likewise have been amended and claim 29 has been canceled in view of the amendments to claim 26, from which they depend.

New claims 45-47 are supported by the claims as filed: Claim 45 reiterates previously canceled claim 33. Claim 46 recites the Markush group of binding pairs that was previously recited in claim 26. Claim 47 is similar to claim 27. Accordingly, there is no new matter.

The amended claims are presented above in a "clean" form, as required under 37 C.F.R. § 1.121(c)(i). In addition, a marked up version of the amended claims, showing additions

(underlined) and deletions (bracketed) are presented in the attached pages pursuant to 37 C.F.R. § 1.121(c)(ii). All pending claims are set forth in Appendix B.

REJECTIONS UNDER 37 C.F.R. § 103(a):

In the Advisory Action, the Examiner reiterated the rejection of the claims as obvious over Bernard in view of Chick, Lee and Dykens. Without acquiescing to the Examiner's rejections, Applicants have amended the claims and respectfully submit that the amended claims are patentable over the cited references.

The amendments to the claims and addition of new claims has been done without intent to abandon any previously claimed subject matter, and without intent to acquiesce to any rejection of record. Applicants reserve the right to pursue the canceled subject matter in a continuation application.

Applicants respectfully submit that the rejections have been overcome and request that the rejections be withdrawn.

CONCLUSION

For the foregoing reasons, Applicants submit that all of the grounds of rejection have been overcome, and that the application comports with the requirements of 35 U.S.C. § 103(a). A prompt indication of allowable subject matter would be much appreciated.

If the Examiner has any questions concerning this communication, or would like to discuss the application, the art, or other pertinent matters, he is welcome to contact the undersigned attorney at 650-330-0900.

Respectfully submitted,

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Appendix A: Marked Up Version Of The Claims Under 37 C.F.R. § 1.121(c)(ii)

Appendix B: Claims Pending Upon Entry Of The Amendments

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APPENDIX A

MARKED UP VERSION OF THE CLAIMS UNDER 37 C.F.R. § 1.121(c)(ii)

26. (Twice Amended) A composition comprising a first member of a binding pair directly or indirectly attached to fluorescein and a second member of the binding pair directly or indirectly attached to cyanine 5, wherein the first and second members of the binding pair are associated so that the fluorescein and cyanine 5 are in fluorescence resonance energy transfer proximity to each other, wherein said [binding pairs are selected from the group consisting of antigen-antibody, biotin-avidin, biotin-streptavidin, hormone-hormone binding protein, receptor-ligand, IgG-protein A, lectin-carbohydrate, enzyme-enzyme cofactor, enzyme-enzyme inhibitor, enzyme-substrate and fragments or analogs thereof] indirect attachment is effected through a linking moiety selected from the group consisting of an antibody, antibody fragment, biotin and streptavidin, with the proviso that at least one member of the binding pair must be indirectly attached to fluorescein or cyanine 5.

27. (Amended) The composition of claim 26, wherein the first member of the binding pair is directly attached to fluorescein [and the second member of the binding pair is directly attached to cyanine 5], and the direct attachment is effected through a covalent bond.

28. (Amended) The composition of claim 26, wherein the first member of the binding pair is indirectly attached to fluorescein and the second member of the binding pair is indirectly attached to cyanine 5 [, and the indirect attachment is effected through one or more linking moieties].

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APPENDIX B
CLAIMS PENDING UPON ENTRY OF THE AMENDMENTS

26. (Twice Amended) A composition comprising a first member of a binding pair directly or indirectly attached to fluorescein and a second member of the binding pair directly or indirectly attached to cyanine 5, wherein the first and second members of the binding pair are associated so that the fluorescein and cyanine 5 are in fluorescence resonance energy transfer proximity to each other, wherein said indirect attachment is effected through a linking moiety selected from the group consisting of an antibody, antibody fragment, biotin and streptavidin, with the proviso that at least one member of the binding pair must be indirectly attached to fluorescein or cyanine 5.

27. (Amended) The composition of claim 26, wherein the first member of the binding pair is directly attached to fluorescein, and the direct attachment is effected through a covalent bond.

28. (Amended) The composition of claim 26, wherein the first member of the binding pair is indirectly attached to fluorescein and the second member of the binding pair is indirectly attached to cyanine 5.

30. (Amended) The composition of claim 26, wherein the binding pair is an enzyme-enzyme substrate pair.

31. (Amended) The composition of claim 26, wherein the binding pair is an antibody-antigen pair.

32. (Amended) The composition of claim 26, wherein the binding pair is a biological receptor-ligand pair.

34. The composition of claim 26, wherein the fluorescence resonance energy transfer proximity is about 1 Å to about 100 Å.

35. The composition of claim 34, wherein the fluorescence resonance energy transfer proximity is between about 5 Å to about 80 Å.

36. The composition of claim 35, wherein the fluorescence resonance energy transfer proximity is between about 10 Å to about 70 Å.

37. The composition of claim 36, wherein the fluorescence resonance energy transfer proximity is between about 20 Å to about 60 Å.

45. (New) The composition of claim 26, wherein the binding pair is complementary oligonucleotides.

46. (New) The composition of claim 26, wherein the binding pairs are selected from the group consisting of antigen-antibody, hormone-hormone binding protein, receptor-ligand, lectin-carbohydrate, enzyme-enzyme cofactor, enzyme-enzyme inhibitor, enzyme-substrate and fragments or analogs thereof.

47. (New) The composition of claim 26, wherein the second member of the binding pair is directly attached to cyanine 5, and the direct attachment is effected through a covalent bond.